

TOPICAL ANALYSIS
OF
DESCRIPTIVE GEOGRAPHY,
UNITED STATES HISTORY,
AND
PHYSIOLOGY AND HYGIENE.

BY
GEORGE S. WEDGWOOD.

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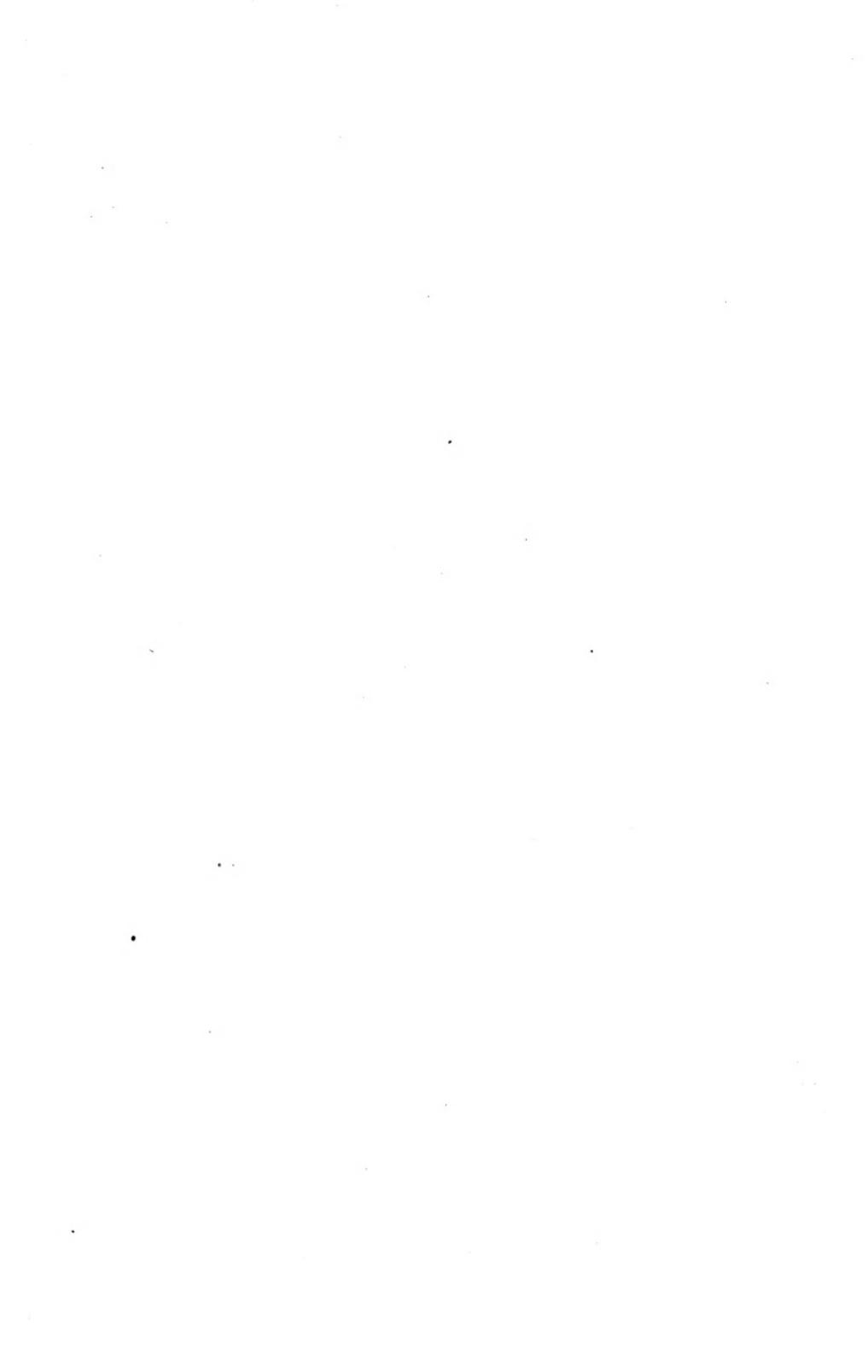
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TOPICAL ANALYSIS
OF
DESCRIPTIVE GEOGRAPHY,
UNITED STATES HISTORY,
AND
PHYSIOLOGY AND HYGIENE.

DESIGNED FOR USE IN OUR COMMON SCHOOLS.

BY
George S. Wedgwood.

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PREFACE.

The object aimed at in the preparation of this book was to place in the hands of the pupils a synopsis of the principal topics to which they should pay *special* attention in the preparation of their lessons, and to have these topics so connected that they may be easily learned and retained.

The necessity for such a plan has been long apparent from the many failures made in teaching these branches, as witnessed in a large majority of our schools.

Take, for instance, the study of History. How many teachers have labored hard and long trying to "get through the book" with a class, only to find on examination that very few, if any, of the pupils could relate, either orally or in writing, in language not borrowed from the text book (and few even in that) the history of any important period of campaign!

Why is this, if not because too much time has been spent in memorizing unimportant matter? and that, too, so disconnected that the first part of the story was forgotten before the last was learned.

Place the text book *alone* in the hands of the teacher and in too many cases questions from the margin of the pages are “shot at” the class and answers as quickly returned, and on examination you will find that the students (and perhaps the teacher) are using language, half of which they have no more idea of the meaning of, than so much Greek.

Take the text book away from the scholars, and teacher too, during the time of recitation; assign the lessons by topics; let the pupils use the text books for reference in preparing their lessons and require the recitations to be both oral and written and it will not be long before the pupils will find it easier to use language with which they are acquainted and to have the facts connected in the order in which they occurred. There will be no difficulty about the dates; and the teacher will soon be ashamed to come before her class unprepared to lead them rather than be dragged along by them.

The same may be said of Geography. There is probably more time *wasted* in the study of Geography than there is spent profitably.

We need more blackboard work; more map-drawing; more learning where *important* cities, rivers, railroads, mountains, &c., are and *why they are important*, and less searching for minor details and less important places that have nothing about them to recommend them to the mind of the child.

Why our Primary Geographies take the young child to every nook and corner of the old world and leave him in comparative ignorance of his own State and country is a mystery.

Good wall maps with text books for reference in preparing

the lessons, and an analysis of the more important topics from which to assign them, seems more in harmony with the limited time in which a large majority of our children have to procure their knowledge of Geography.

Another important feature of this work is, that it solves the question so often asked, "How can we arrive at a uniformity of text-books?" The answer is, "We can never accomplish it."

There are so many good text-books on every branch of study that a uniformity extensive enough to be of any practicable good will never be arrived at; nor is such a change desirable.

All the text-books in the world cannot change the important facts of history. They cannot cause Chicago and London to exchange places, nor can they change the causes of their importance. They cannot make the veins perform the work assigned to the arteries. The principal difference between any two good text-books on the same branch of study is in the style of writing, and the methods of presenting the subjects to the student. These differences we need for the sake of comparison. One scholar will readily understand the language of the one while another will quickly catch the meaning by the plan laid down by the other. The leading topics are the same in all. Why not then place the analysis of the topics in the hands of each pupil; have the lessons assigned and recited from it, while the text-books are used for reference in preparing the lessons for recitation? If this plan is correct, the greater the variety of good text-books in the school the better.

It may not be out of place here, especially for the benefit

of those teachers who have not been in the habit of teaching by topics, to give some advice in regard to the manner of conducting a recitation. No general rule can be laid down to apply to all classes; the teacher should study the general plan and apply it to her school according to the circumstances.

The class in question is one in History and numbers twenty scholars. The lesson is "Jackson's Administration." The class is divided into two sections. Monday, section I. will place on the board the work indicated in the topical analysis on that subject while each member of section II. will prepare fifteen questions in writing on the same lesson. When the class is called to recite, section I. goes to the board without books and section II. exchange question papers with each other and answer them in turn, each scholar is required to be able to answer his own questions, and by exchanging, his ability to answer other questions on the lesson prepared by his classmates is tested.

A teacher who has not tried this plan will be surprised at the amount of interest manifested by the class in preparing worthy questions. The work of answering the questions will occupy about twenty minutes; then ten minutes are allowed the class to correct errors at the board.

Tuesday, this work is alternated, section II. going to the board while section I. prepare questions—taking the same lesson as on Monday.

In a small class it might be well to let all the scholars work at the board one day and prepare questions the next day.

This is but one of many interesting methods of conducting recitations with the aid of topical analysis.

Hoping that this work may prove valuable in the school room and meet with criticisms enough to bring it to the notice of the public, it is respectfully submitted.

G. S. W.

GEOGRAPHY.

PART I.

DIRECTION AND DISTANCE.

1. DIRECTION.	Drill thoroughly in direction until each scholar can point accurately and promptly to all the points of the compass.
1. Use.	
2. Names.	
a. East	
b. West.	
c. North.	
d. South.	
e. N. E.	
f. S. E.	
2. DISTANCE.	Drill thoroughly in distance by actual measurement of lines, boards, floor, etc., and by comparing things measured with things which the scholars have not measured, until each scholar is a good judge of distance.
1. Inches.	
2. Feet.	
3. Rods.	
4. Miles.	
5. Fractional parts of miles.	
3. SURFACE.	Drill thoroughly in distance by actual measurement of lines, boards, floor, etc., and by comparing things measured with things which the scholars have not measured, until each scholar is a good judge of distance.
1. Square inches.	
2. " feet.	
3. " rods.	
4. " miles.	
5. Acres.	

LESSONS ABOUT HOME.

1. SCHOOL HOUSE.

1. *Shape.*

- a. Tell the shape orally.
- b. Show the shape by drawing on blackboard.

2. *Position.*

- a. Tell the position of seats, desks, stove, etc., in the school room.
- b. Show the position by locating them in the drawings.

3. *Map.*

- a. Definition.
- b. Draw maps of school room, school house and grounds, dwelling houses, farms, sections of land, townships, etc.

2. CITY OR TOWNSHIP.

1. *Map.*

- a. Draw map of city or township, and locate the streets, prominent buildings, (such as depot, banks, court house, school houses, churches, warehouses, mills, etc.)
- b. Give lessons on the uses and means of carrying on the different kinds of business of each.
- c. Divide townships into sections and quarter sections.
- d. Definitions of things shown on map with illustrations.

3. COUNTY.

1. *Map.*

- a. Draw map of county, numbering the townships.
- b. Locate the principal cities, villages, railroads, rivers, etc.
- c. Definitions of things shown on the map.

2. *Government of the County.*

- a. Name the officers and tell the duties of each.

4. STATE (where taught).

1. *Map.*

- a. Draw map of the State and locate the railroads, rivers, mountains, lakes, watersheds, valleys, and important cities, and tell for what each is important.
- b. Definitions of things shown on the map.

2. *Surface.*

- a. Elevations.
- b. Drainage.

3. *Products.*

- a. Natural.
- b. Cultivated.
- c. Quality of soil.

4. *Animals.*

- a. Domestic.
- b. Wild.

5. *Position.*

- a. Boundaries.
- b. Area.

6. *Public Buildings.*

- a. Where located.
- b. Uses and how controlled.

7. *Government of State.*

- a. State officers and their duties.
- b. Tenure of office and how changed.
- c. How laws are made.

5. **HISTORY.**

1. Of State.
2. Of County.
3. City or Township.

GEOGRAPHICAL DEFINITIONS.

(Map of the World.)

1. Continents.	{	Define and point to all shown on the map of the hemispheres.
2. Oceans.		
3. Islands.		
4. Coasts.		
5. <i>Coast Lands.</i>	{	Define each; Point to them on map; Draw map illustrating each from memory.
1. Peninsulas.		
2. Isthmus.		
3. Capes.		
4. Promontory.		
6. <i>Coast Waters.</i>	{	a. Define. b. Illustrate. c. How represented on map?
1. Sea.		
2. Gulf.		
3. Bay.		
4. Strait.		
7. <i>Surface of Land.</i>	{	a. Define. b. Illustrate. c. How represented on map?
1. Valleys.		
2. Plains.		
3. Hills.		
4. Mountains.		
5. Table lands.		
6. Marsh.		
7. Desert.		
8. Watershed.		

8. *Waters upon the Land.*

1. Springs.

- a. Define.
- b. How formed?

2. Rivers.

- a. Define.
- b. How formed?
- c. Right and left banks.
- d. Source.
- e. Mouth.
- f. Basin.
- g. Bed.
- h. Falls.
- i. Uses.

3. River Systems.

- a. Define.
- b. Formation.
- c. Use.
- d. Show them on the map.

4. Lakes.

- a. Definition.
- b. Formation.
- c. Head.
- d. Foot.
- e. Shore.
- f. Use.

Canals.

- a. Definition.
- b. How made.
- c. Uses.

9. *Occupations of Man.*

1. Farming.	}	a. Definition.
2. Lumbering.		b. Object.
3. Mining.		c. Nature of the country where each is best adapted.
4. Quarrying.		
5. Manufacturing.		
6. Commerce.		

PART II.

LESSONS ON THE EARTH.

(Illustrated by use of globe, if possible.)

1. *Its shape.*
2. *Its relation to other planets.*
3. *Its form.*
 1. How proven.
4. *Its size.*
 1. Diameter.
 2. Circumference.
5. *Lines and Circles upon the earth.*

1. Axis.
2. Poles.
3. Equator.
4. Parallels.
5. Meridians.

}	a. Define.
	b. Illustrate.

6. *Circles divided.*
 1. Degrees.
 - a. Number.
 - b. Size.
7. *Measurement of the earth.*
 1. Latitude.
 2. Longitude.

}	a. Definition.
	b. How reckoned.
	c. Examples.

8. *Tropics.* 1. Cancer.
 2. Capricorn. } a. Location.
 9. *Polar Circles.* 1. Arctic.
 2. Antaretic. } b. Uses.

10. *Zones.* 1. Torrid.
 2. Temperate } a. Definition.
 3. Frigid. } b. Boundaries.
 c. Width.
 d. Climate.
 e. Vegetation.
 f. Animals.
 g. Inhabitants.

11. *Movements of the earth.*
 1. Diurnal. 1. a. Definition.
 2. Annual. } b. Effect.
 c. Illustrate with globe.

12. *Distribution of land and water.*
 1. Land. 1. a. Proportion.
 2. Water. } b. Location.

13. *Hemispheres.*
 1. Eastern. 1. a. Divisions of land.
 2. Western. } b. Washed by what waters.

MAP OF NORTH AMERICA.

1. *Position.*
 1. Divisions.
 2. Boundaries.
 3. Bays and Peninsulas.
 4. Islands.

2. *Surface.*
 1. Mountains and other highlands.
 a. Position.
 b. Extent.
 2. Rivers and Lakes.

3. *Climate and Vegetation.*

1. In what zones.
2. Chief products.

4. *Divisions.*

1. United States.
2. British America.
3. Mexico.
4. Central America.
5. West Indies.
6. Danish America.

- a. Boundaries.
- b. Under what government.

5. *Map.*

1. Draw an outline map of North America from memory, locating the different political divisions.

MAP OF UNITED STATES.

1. *Position and Outline.*

1. Boundaries.
2. Area in square miles.
3. Indentation of coasts.

2. *Surface.*

1. Elevations.
 - a. Mountain systems.
 - b. Other highlands.
2. Depressions.

3. *Rivers.*

1. Mississippi.
2. Missouri.
3. Ohio.
4. Hudson.
5. Colorado.
6. Rio Grande.
7. Columbia.

- a. Source.
- b. Course.
- c. Drains what?
- d. Empties where?
- e. Tributaries.

4. *Islands.*

1. Location.
2. Of what importance.

5. *Climate.*
 1. Summer.
 2. Winter.
6. *Vegetation.*
 1. Natural.
 2. Cultivated.
 3. Nature of soil.
7. *Inhabitants.*
 1. Number and Nationalities.
 2. Occupations.
 3. Education.
 4. Religions.
8. *Government.*
 1. Form.
 2. Departments.
9. *States divided into groups.*
 1. New England.
 2. Middle.
 3. South-Eastern.
 4. Central.
 5. Western.

} a. Number of States in each group

} b. Names of States in each group.

} c. Names of Territories.
10. *Territories.*
11. *Map.*
 1. Draw well defined outline of the United States from memory, and locate the principal rivers, mountain ranges, lakes, gulfs, bays, and peninsulas.

STATES AND TERRITORIES OF UNITED STATES.

1. Maine.
 2. New Hampshire.
 3. Vermont.
 4. Massachusetts.
 5. Rhode Island.
 6. Connecticut.
 7. New York.
 8. Pennsylvania.
 9. New Jersey.
 10. Delaware.
 11. Maryland.
 12. Virginia.
 13. West Virginia.
 14. North Carolina.
 15. South Carolina.
 16. Georgia.
 17. Alabama.
 18. Florida.
 19. Ohio.
 20. Indiana.
 21. Illinois.
 22. Michigan.
 23. Wisconsin.
 24. Kentucky.
 25. Missouri.
 26. Iowa.
 27. Minnesota.
 28. Nebraska.
 29. Kansas.
 30. Tennessee.
 31. Mississippi.
 32. Louisiana.
 33. Arkansas.
 34. Texas.
 35. Nevada.
 36. California.
 37. Oregon.

} 1. Position.
 a. Boundaries. b. Area.
 c. Indentation coasts.
 2. Surface.
 a. Mountains and other highlands.
 b. Valleys, etc.
 3. Rivers and Lakes.
 a. Names, source and course.
 b. Drains what?
 c. Empties where?
 4. Climate.
 5. Vegetation.
 a. Natural and cultivated.
 b. Nature of soil.
 6. Commerce.
 a. Exports.
 b. Imports.
 7. Animals.
 a. Domestic.
 b. Wild.
 8. Minerals.
 a. Kind and extent.
 9. Inhabitants.
 a. Number and nationality.
 b. Education and religion.
 c. Industry of.
 d. Occupations.
 e. Modes of travel.
 10. Government.
 a. Form of.
 11. Important Cities.
 a. Location.
 b. Important for what.
 12. History.
 a. When admitted into the Union.
 b. From what Territory or State.
 13. Map.
 a. Draw a map of each State from memory, locating the principal rivers, railroads, cities, mountains, and lakes.

Territories.

1. Washington.
2. Arizona.
3. Utah.
4. Idaho.
5. New Mexico.
6. Colorado.
7. Wyoming.
8. Montana.
9. Indian.
10. Dakota.

District of Columbia.]

} Analysis the same as that of the States.

REVIEW.

Draw a complete map of the United States from memory.

PART III.

BRITISH AMERICA.

1. *Position.*
 1. Boundaries.
 2. Area.
 3. Indentations and projections of coasts.
2. *Surface.*
 1. Elevations.
 2. Depressions.
3. *Rivers and Lakes.*
 1. Names, source and direction.
 2. Drains what?
 3. Empties where?
4. *Islands.*
 1. Location and names.
 2. Of what importance.

5. *Climate.*

1. Summer.
2. Winter.

6. *Government.*

1. Title of Chief Executive.
2. Dependent on.
3. Legislature elected how?

7. *Political Divisions.*

<ol style="list-style-type: none"> 1. Dominion of Canada. 2. Prince Edward's Island. 3. Newfoundland. 4. British Columbia. 	<ol style="list-style-type: none"> a. Boundaries. b. Area. c. Climate. d. Soil. e. Vegetation. f. Occupation of inhabitants. g. Minerals. h. Animals. i. Education and religion. j. Chief cities.
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8. *Map.*

Draw map of British America from memory and locate important cities, rivers, railroads, mountains, and lakes.

DANISH AMERICA.

1. *Divisions.*

<ol style="list-style-type: none"> 1. Greenland 2. Iceland 	<ol style="list-style-type: none"> a. Position. b. Size. c. Climate. d. Surface. e. Government. f. Inhabitants—Occupation of. g. Animals. h. Vegetation. i. Products. j. Describe the coasts.
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MEXICO.

1. *Position.*
 1. Boundaries.
 2. Area.
 3. Indentation and projection of coasts.
2. *Surface.*
 1. Elevation. { Mountains.
Volcanoes.
 2. Depressions.
3. *Rivers and Lakes.*
 1. Names, source and course.
 2. Drain what?
 3. Empty into.
4. *Islands.*
 1. Location and importance.
5. *Climate.*
 1. Summer.
 2. Winter.
6. *Vegetation.*
 1. Chief products.
7. *Inhabitants.*
 1. Number and nationality.
 2. Occupations.
8. *Commerce.*
 1. Exports.
 2. Imports.
9. *Minerals.*
10. *Government.*
 1. Form of.
11. *Important Cities.*
 1. Location.

2. Important for what?
12. *Map.*
 1. Draw complete map of Mexico from memory.

CENTRAL AMERICA.

1. *Position.*
 1. Boundaries.
 2. Area.
 3. Indentation and projection of coasts.
2. *Surface.*
 1. Elevations.
 2. Depressions.
3. *Rivers and Lakes.*
 1. Name, source, and direction.
 2. Drainage.
 3. Empty where?
4. *Climate.*
5. *Chief Products.*
6. *Commerce.*
 1. Exports and Imports.
7. *Minerals.*
8. *Inhabitants.*
 1. Number and Nationality.
 2. Occupations.
 3. Education and Religion.
9. *Government.*
 1. Form of.
10. *States.*
 1. Guatemala.
 2. San Salvador.
 3. Honduras.
 4. Nicaragua.
 5. Costa Rica.

} a. Boundaries.
} b. Important cities and important
} for what.

11. *Map.*

1. Draw complete map of Central America from memory.

WEST INDIES.

1. *Divisions.*

1. Greater Antilles.
 - a. Cuba.
 - b. Hayti.
 - c. Porto Rico.
 - d. Jamaica.
2. Lesser Antilles.
3. Bahamas .

} 1. Position, Boundaries, Area.
 2. Surface.
 3. Climate.
 4. Vegetation and soil.
 5. Commerce—Exports and Imports.
 6. Animals—Domestic and Wild.
 7. Inhabitants—
 a. Number and Nationality.
 b. Occupations.
 c. Industry.
 d. Education and Religion.
 8. Government—Form of.
 9. Important Cities—Important for what?

2. *Map.*

Draw complete map of West Indies from memory.

SOUTH AMERICA.

GENERAL DESCRIPTION.

1. *Position.*

1. Boundaries.
2. Area.
3. Indentations and projections of coasts.

2. *Surface.*

1. Elevations.
 - a. Mountain systems.
 - b. Other highlands.
2. Depressions.

3. *Rivers and Lakes.*

1. The Magdalena.	a. Source. b. Course. c. Drains what? d. Empties where?
2. The Orinoco.	
3. The Amazon.	
4. The La Plata.	
5. Lake Titicaca.	

4. *Islands.*

1. Location and importance.

5. *Climate.*

1. Summer.
2. Winter.

6. *Vegetation.*

1. Natural.
2. Cultivated.
3. Nature of soil.

7. *Commerce.*

1. Exports.
2. Imports.

8. *Animals.*

1. Domestic.
2. Wild.

9. *Minerals.*10. *Inhabitants.*

1. Number and nationality.
2. Occupations.
3. Education and Religion.
4. Industry.
5. Modes of travel.

11. *Political Divisions.*

1. Brazil.	}	1. Position.
2. Rio Janeiro.		a. Boundaries and Area.
3. Guiana.		2. Surface.
		3. Climate.
		4. Commerce.
4. Venezuela.		a. Exports.
5. Columbia.		b. Imports.
6. Ecuador.		5. Government.
7. Peru.		a. Form of.
8. Bolivia.		6. Important Cities.
9. Chili.		a. Location.
10. Argentina.		b. Important for what?
11. Uruguay.		
12. Paraguay.		
13. Patagonia.		

12. *Map.*

Draw complete map of South America from memory.

EUROPE.

1. *Position.*

1. Boundaries.
2. Area.
3. Indentation and projection of coasts.

2. *Surface.*

1. Elevations.
 - a. Mountains and other highlands.
2. Depressions.

3. *Rivers.*

1. Names, and source.
2. Direction and extent.
3. Drainage.
4. Empty where?

4. *Lakes.*

1. Names and location.

5. *Climate and Vegetation.*

- 1. Southern Europe.
- 2. Central Europe.
- 3. Northern Europe.

} a. Summers.
} b. Winters.

6. *Nations of Europe.*

- 1. Germanic.
- 2. Romanic.
- 3. Slavonic.
- 4. Celts.

} a. Composed of what?

7. *Independent States of Europe.*

- 1. Number.
- 2. Names and forms of government.

8. *Countries of Europe.*

- 1. British Isles.
- 2. Germany.
- 3. Russia.
- 4. Austria.
- 5. Turkey.
- 6. France.
- 7. Switzerland.
- 8. Norway.
- 9. Sweden.
- 10. Denmark.
- 11. Holland.
- 12. Belgium.
- 13. Spain.
- 14. Portugal.
- 15. Italy.
- 16. Greece.

} 1. Position.
} a. Boundaries.
} b. Area.
} c. Indentation of coasts.
} 2. Surface.
} a. Mountains and other highlands.
} b. Depressions.
} 3. Climate.
} a. Summers.
} b. Winters.
} 4. Vegetation and soil.
} 5. Commerce.
} a. Exports.
} b. Imports.
} 6. Animals.
} a. Domestic.
} b. Wild.
} 7. Minerals.
} 8. Government.
} a. Form of.
} 9. Inhabitants.
} a. Number and Occupations.
} b. Education and Religion.
} c. Modes of travel.
} 10. Important Cities.
} a. Location.
} b. Important for what?

9. *Map.*

1. Draw complete map of Europe from memory and locate states, rivers, mountain ranges, capes, bays, gulfs, islands and important cities.

ASIA.

1. *Position.*

1. Boundaries.
2. Area.
3. Indentations and projections of coasts.

2. *Surface.*

1. Elevations.
 - a. Mountains and other highlands.
2. Depressions.

3. *Rivers and Lakes.*

1. Names, source, direction and empties where.
2. Drainage.

4. *Climate.*

1. How varied.

5. *Vegetation.*

1. Natural and cultivated.

6. *Commerce.*

1. Exports and imports.

7. *Animals.*

1. Domestic and wild.

8. *Inhabitants.*

1. Number and races.

9. *States.*

1. Russia in Asia. 2. Turkestan. 3. Persia. 4. Afghanistan. 5. Beloochistan. 6. Turkey in Asia. 7. Arabia. 8. India. 9. Farther India. 10. China. 11. Japan. 12. East India Archipelago.	1. Position. 2. Surface. 3. Climate. 4. Vegetation and Soil. 5. Chief Products. 6. Minerals. 7. Inhabitants. a. Occupations and Industry. b. Education and Religion. c. Modes of travel. 8. Governments. a. Forms of. 9. Important Cities. a. Location. b. Important for what.
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10. *Map.*

1. Draw a map of Asia from memory.

— —

AFRICA.

1. *Position.*

1. Boundaries.
2. Area.
3. Indentation and projection of coasts.

2. *Surface.*

1. Mountains and other highlands
2. Depressions.

3. *Rivers and Lakes.*

1. Name, source, direction and drainage.

4. *Climate.*5. *Vegetation and soil.*6. *Commerce.*

1. Exports and Imports.

7. *Animals.*8. *Minerals.*

5. *Inhabitants.*

1. Number, races and occupations.
2. Education and religion.
3. Modes of travel.

10. *States.*

<ol style="list-style-type: none"> 1. Morocco. 2. Algiers. 3. Tunis. 4. Tripoli. 5. Egypt. 6. Nubia. 7. Abyssinia. 8. The Sahara 9. The Soudan. 10. Cape Colony. 	<ol style="list-style-type: none"> 1. Position. 2. Surface. 3. Climate. 4. Vegetation. 5. Chief products. 6. Minerals. 7. Inhabitants. <table border="0" style="margin-left: 20px;"> <tr> <td>a. Occupation.</td> </tr> <tr> <td>b. Education and Religion.</td> </tr> </table> 8. Important Cities. <table border="0" style="margin-left: 20px;"> <tr> <td>a. Location.</td> </tr> <tr> <td>b. Important for what?</td> </tr> </table> 	a. Occupation.	b. Education and Religion.	a. Location.	b. Important for what?
a. Occupation.					
b. Education and Religion.					
a. Location.					
b. Important for what?					

11. *Map.*

1. Draw map of Africa from memory.

AUSTRALIA.

1. *Divisions.*

1. The Continent.

2. Australian Islands.

3. Polynesian Islands.

2. *Map.*

- Draw map of Australia, and surrounding islands from memory.

<ol style="list-style-type: none"> 1. Position. 2. Surface. 3. Rivers. 4. Coast. 5. Climate. 6. Vegetation and soil. 7. Commerce. <table border="0" style="margin-left: 20px;"> <tr> <td>a. Exports and Imports.</td> </tr> </table> 8. Inhabitants. <table border="0" style="margin-left: 20px;"> <tr> <td>a. Number and nationality.</td> </tr> <tr> <td>b. Occupations.</td> </tr> <tr> <td>c. Education and Religions.</td> </tr> </table> 9. Important Cities. <table border="0" style="margin-left: 20px;"> <tr> <td>a. Location.</td> </tr> <tr> <td>b. Important for what?</td> </tr> </table> 	a. Exports and Imports.	a. Number and nationality.	b. Occupations.	c. Education and Religions.	a. Location.	b. Important for what?
a. Exports and Imports.						
a. Number and nationality.						
b. Occupations.						
c. Education and Religions.						
a. Location.						
b. Important for what?						

REVIEW.

1. In what latitude and longitude is the capital of each state and country of the globe?
2. Give the shortest and most practicable route to travel from Chicago, Ill., to each of the capitals of the states and countries shown on the maps, with the different races of men, animals, fruits and vegetables, and other objects of interest that would be seen in such countries.

HISTORY OF THE UNITED STATES.

PERIOD OF DISCOVERIES.

Discoveries and Claims.

1. Spanish.
 - a. Discoverers.
 - b. What discovered and dates.
 - c. Territory claimed.
 - d. Settlements.
2. French.
 - a. Discoverers.
 - b. What discovered, and dates.
 - c. Territory claimed.
 - d. Settlements.
3. Dutch.
 - a. Discoverers.
 - b. What discoveries, and dates.
 - c. Territory claimed.
 - d. Settlements.
4. English.
 - a. Discoverers.
 - b. Discoveries and dates.
 - c. Territory claimed.
 - d. Settlements.

American Indians.

1. Number.
2. Manner of living.
3. Civilization.
4. Claim to America

REVIEW OF PERIOD I.

1. Draw a map of North America.
2. Give a brief history of the principal discoverers, what each discovered, and the routes taken by each.

COLONIAL PERIOD.

History of the Colonies—1607, 1775.

Virginia. Massachusetts. New Hampshire. Maryland. Connecticut. New York. New Jersey. Pennsylvania. Delaware. North Carolina. South Carolina. Georgia. Rhode Island.	} 1. Government, kind of, define. 2. Founded, when, where and by whom. 3. Troubles. } 4. Religion. 5. Education. 6. Leading men.
---	--

French Wars.

1. King William's war. 2. Queen Anne's war. * 3. King George's war 4. French and Indian war.	} a. Causes. b. Dates. c. Where fought. d. Objects. e. Parties engaged. f. Results. g. By what treaty terminated. h. Effect on the Colonies.
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REVIEW OF COLONIAL PERIOD.

1. Draw a map of the Colonies.
2. Give a list of noted men of this period, and state for what each was noted.
3. Name the French wars, and show on the map where each was carried on.

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REVOLUTIONARY PERIOD.

Causes of the Revolutionary war.

1. Stamp Act.
 - a. Its provisions.
 - b. Objections to it.
2. Navigation Acts.
 - a. Provisions.
 - b. Objections to them.
3. Unjust taxation.
 - a. In what did it consist?
4. Boston port bill.
 - a. Provisions.
 - b. Object.
 - c. Effect.
5. Quartering British troops.
6. Steps taken in opposition to these acts, and leading men.
7. First Colonial Congress assembled.
 - a. When, where and what was done.

Military operations of 1775.

1. Battle of Lexington.
 - a. Date.
 - b. Object.
 - c. Commanders.

- d. Results.
- e. Incidents of the battle.
- 2. Ticonderoga and Crown Point captured.
 - a. By whom.
 - b. Results.
- 3. Battle of Bunker Hill.
 - a. Date.
 - b. Object.
 - c. Commanders.
 - d. Results.
 - e. Incidents of the battle.
- 4. Draw map of Boston and vicinity, showing position and movements of Bunker Hill, Lexington and Concord.
- 5. Commander-in-chief appointed, when, where and by whom.
- 6. Invasion of Canada.
 - a. By whom.
 - b. Date.
 - c. Object.
 - d. Engagements.
 - e. Leading officers.
 - f. Results.

Campaign of 1776.

- 1. Siege of Boston.
 - a. How conducted.
 - b. Results.
- 2. Battle of Fort Moultrie.
 - a. Date.
 - b. Object.
 - c. Commanders.

- d. Results.
- e. Incidents.
- 3. Declaration of Independence.
 - a. When made.
 - b. By whom.
 - c. Leading men.
 - d. Effect on the country.
- 4. Battle of Long Island.
 - a. Date.
 - b. Object.
 - c. Commanders.
 - d. Results.
 - e. Draw map of position and movements of troops.
- 5. Washington's retreat through New Jersey.
 - a. Engagements.
 - b. Leading officers.
 - c. Incidents of campaign.
 - d. Results.
 - e. Draw map showing position and movements of troops.
- 6. Winter quarters, where.

Campaign of 1777.

- 1. Washington's campaign in New Jersey and Pennsylvania.
 - a. Object.
 - b. Movement of troops.
 - c. Engagement.
 - d. Leaders.
 - e. Incidents.
 - f. Results.
 - g. Draw map of movements in Pennsylvania.

2. Burgoyne's Invasion.
 - a. Object.
 - b. Route taken.
 - c. Engagements.
 - d. Results of the campaign.
3. Winter quarters.
 - a. Where.
 - b. Condition of the army.
4. Congress.
 - a. Adopted what.

Campaign of 1778.

1. The French Alliance.
 - a. Why so called.
 - b. How brought about.
 - c. Its effect on England and America.
 - d. What aid received from France.

British retreat from Philadelphia to New York.

- a. Cause.
- b. Engagements.
- c. Results.
3. French fleet.
 - a. Operations in 1778.
 - b. Results.

Campaign of 1779.

1. In the south.
 - a. What troops.
 - b. Object.
 - c. Engagements.
 - d. Results.
2. In the north.

- a. What operations.
- b. Results.
3. Situation at close of 1779.
 - a. General feelings.
 - b. Cause.
 - c. What trouble in purchasing supplies?

Campaign in 1780.

1. Siege of Charleston.
 - a. By whom?
 - b. Result.
 - c. Leading men.
2. Gates' operations.
 - a. Route.
 - b. Engagements.
 - c. Results.
3. In the north.
 1. Treason of Arnold.
 - a. Cause.
 - b. How discovered.
 - c. Results.
 2. Condition of the army in winter of 1780-81.
 - a. Demonstrations made.
 - b. How met.

Campaign in 1781.

1. Greene in Carolinas.
 - a. Engagements.
 - b. Leading officers.
 - c. Incidents of the campaign.
 - d. Results.
2. Draw map of the Carolinas, showing movements of troops.

3. Siege of Yorktown.
 - a. Forces.
 - b. Leading officers.
 - c. Duration.
 - d. Results.
4. Close of war.
 - a. What steps were taken.
 - b. Treaty of peace signed when, and where.
5. Articles of Confederation adopted.
 - a. Object.
 - b. When adopted.
 - c. Defects.
 - d. Continued how long.
6. Constitution adopted.
 - a. When.
 - b. How.
 - c. What opposition
 - d. What objections.
7. Parties formed.
 - a. Cause.
 - b. How Divided.

REVIEW OF THE REVOLUTIONARY PERIOD.

1. Write a list of battles in chronological order, giving commanders and successful parties.
2. Write a brief history of the most prominent actors of the Revolution.
3. Trace on the map of the United States the movements of the armies, and relate the most important incidents from Lexington and Concord to the close of the war.

CONSTITUTIONAL PERIOD.

Washington's Administration 1789 to 1797.

1. Election.
 1. By what party.
 2. Meaning of the election.
1. Important facts.
 1. The government established.
 - a. Branches and duties of each.
 - b. Departments and duties of each.
 2. Revenue.
 - a. Why needed.
 - b. How accomplished.
 3. Seat of government.
 - a. Where established.
 4. French Revolution.
 - a. Its effect in United States.
 5. Whisky insurrection.
 - a. Cause.
 - b. Effect.
 6. Boundaries between Louisiana, Florida and United States.
 - a. How settled.
 - b. Gain to United States.
 7. States admitted.
 - a. What.
 - b. Date.

Adams' Administration, 1797 to 1801.

1. Election.
 1. By what party.
 2. Meaning of the election.

2. Important facts.
 1. French difficulties.
 - a. Cause.
 - b. Extent.
 - c. How terminated.
 2. Washington's death.
 - a. When.
 - b. Where.
 3. Alien and Sedition laws.
 - a. What were they.

Jefferson's Administration, 1801 to 1809.

1. Election.
 1. By what party.
 2. Meaning of the election.
2. Important facts.
 1. Louisiana purchase.
 - a. From whom.
 - b. Price paid.
 - c. Territory included.
 - d. Advantage to United States.
 2. Tripolitan war.
 - a. Cause.
 - b. Incidents.
 - c. Terminated.
 3. Burr-Hamilton duel.
 - a. Cause.
 - b. Results.
 4. Embargo of 1807.
 - a. Causes.
 - b. Provisions.

c. Results.

5. States admitted; what, date.

Madison's Administration, 1809 to 1817.

1. Election.

1. By what party?
2. Meaning of the election

2. Important facts.

1. Non-Intercourse Act.

- a. Provisions.
- b. Results.

2. Battle of Tippecanoe.

- a. Causes.
- b. Parties engaged.
- c. Incidents.

3. War of 1812.

1. Causes of the war.
2. Military operations of 1812.

1. Hull's surrender.

- a. Relate the circumstances.

2. Battle of Queenstown Heights.

- a. Date.
- b. Route.
- c. Leaders.
- d. Results.

3. Naval operations of 1812.

1. Engagements.

- a. Where?
- b. Between whom?
- c. Results.

4. Military operations of 1813.
 1. Army of the West.
 2. Army of the Centre.
 3. Army of the North.
 4. Indian Wars.

} a. Position.
b. Object.
c. Commanders.
d. Movements.
e. Results.
5. Military operations of 1814.
 1. Northern Campaign.
 2. Southern Campaign.

} a. Position.
b. Object.
c. Commanders.
d. Engagements.
e. Results.

 3. Battle of New Orleans.
 - a. Position.
 - b. Object.
 - c. Movements.
 - d. Commanders.
 - e. Results.
 4. War terminated.
 - a. By what treaty?
 - b. When?
 - c. Gain or loss to the United States by the war.
 6. War with Algiers.
 - a. Cause.
 - b. Movements.
 - c. Results.
 7. Bank of United States chartered.
 - a. Give its history.
 8. States admitted.
 - a. What?
 - b. Date.

Monroe's Administration, 1817 to 1825.

1. Election.

1. By what party?
2. Meaning of the election.
2. Important Facts.
 1. Indian War in Georgia.
 - a. How suppressed.
 - b. Results.
 2. Florida Purchase.
 - a. From whom?
 - b. Price paid.
 3. States admitted.
 - a. Date.
 4. Missouri Compromise.
 - a. Cause.
 - b. Provisions.
 5. Monroe Doctrine.
 - a. What was it?
 6. Visit of La Fayette.

J. Q. Adams' Administration, 1825 to 1829.

1. Election.
 1. By what party.
 2. Meaning of election.
2. Important Facts.
 1. Death of eminent men.
 - a. Who?
 2. Protective Tariff.
 - a. Define.
 - b. Where popular?
 - c. Where distasteful and why?

Jackson's Administration, 1829 to 1837.

1. Election.

1. By what party?
2. Meaning of the Election.
2. Important Facts.
 1. United States Bank.
 - a. Charter renewed.
 - b. What troubles.
 2. Black Hawk War.
 - a. Give its history.
 - b. Where fought.
 - c. Results.
 3. Nullification.
 - a. Cause.
 - b. Where endorsed?
 - c. How settled?
 4. Florida War.
 - a. Cause.
 - b. Commanders.
 - c. How conducted?
 - d. Results.
 5. Politics.
 - a. Democrats.
 - b. Whigs.

Advocated what?
 6. States admitted.
 - a. What?
 - b. Dates.

Van Buren's Administration, 1837 to 1841.

1. Election.
 1. By what party?
 2. Meaning of the election.
2. Important Facts.

1. Financial Crisis of 1837.
 - a. Cause.
 - b. Effects.
2. Foreign Affairs.
 - b. Canadian rebellion.
3. States admitted.
 - a. What?
 - b. Date.

Harrison's and Tyler's Administration, 1841 to 1845.

1. Election.
 1. By what party?
 2. Meaning of the election.
2. Important Facts.
 1. Death of Harrison.
 - a. When?
 - b. Who became President?
 2. Tyler's action in the United States Bank Bill?
 - a. What?
 - b. Effect.
 4. Ashburton Treaty.
 - a. Settled what?
 - b. Why so named.
 4. Dorr's Rebellion.
 - a. Where?
 - b. Cause.
 - c. How terminated?
 5. States admitted.
 - a. What.
 - b. Date.

Polk's Administration, 1845 to 1849.

1. Election.

1. By what party?
2. Meaning of the election.
2. Important Facts.
 1. Mexican War.
 - a. Causes.
 - b. Campaigns.

1. Campaign on the Rio Grande.	a. Date.
2. Invasion of Mexico by Taylor.	b. Route taken
3. Conquest of New Mexico and California by Fremont and Kearney.	c. Engagements.
4. Scott's campaign in Mexico.	d. Commanders.
	e. Results.
	f. Incidents of the campaigns.
 2. Peace established.
 - a. How?
 - b. Date.
 - c. Gain or loss to the United States.
 3. Free Soil Party organized.
 - a. When?
 - b. Doctrines.
 4. States admitted.
 - a. What?
 - b. Dates.

Taylor's and Fillmore's Administrations, 1849 to 1853.

1. Election.
 1. By what party?
 2. Meaning of the election.
2. Important Facts.
 1. The Omnibus Bill.
 - a. Its purpose.
 - b. Its provisions.

2. Death of Taylor.
 - a. Date.
 - b. Who became President?
3. Death of Clay and Webster.
 - b. Date.

Pierce's Administration, 1853 to 1857.

1. Election.
 1. By what party?
 2. Meaning of the election.
2. Important Facts.
 1. Gadsden Purchase.
 - a. Provisions.
 2. Kansas-Nebraska Bill.
 - a. Origin.
 - b. Provisions.
 - c. When passed?
 - d. Effect.
 3. Republican Party formed.
 - a. From what parties?
 - b. Platform

Buchanan's Administration, 1857 to 1861.

1. Election.
 1. By what party?
 2. Meaning of the election.
2. Important Facts.
 1. Dred Scott decision.
 - a. Give its history.
 2. John Brown's raid.
 - a. Give its history.
 3. Democratic Party divided.
 - a. Cause.

4. States admitted.

- a. What?
- b. Date.

Lincoln's Administration, 1861 to 1865.

1. Election.

1. By what party?
2. Meaning of the election.

2. Important Facts.

1. Fort Sumter bombarded.

- a. When?
- b. By whom?
- c. Results.

2. Secession.

- a. Definition.
- b. Cause.
- c. What States seceded?

3. Civil War.

- a. Causes.

**REVIEW OF THE CONSTITUTIONAL PERIOD TO THE WAR OF
SECESSION.**

1. Make a list of Presidents from Washington to Lincoln inclusive, in the order in which they were elected.
2. List of political parties in chronological order, with a brief statement of the platforms of each.
3. Review of political meaning of Presidential elections.
4. List of States admitted with dates of admission.
5. List of conspicuous actors of war of 1812, stating for what each was noted.
6. List of conspicuous actors of Mexican war, stating for what each was noted.

7. Prepare a sketch of the life and services of Patrick Henry, John Hancock, Benjamin Franklin, Ethan Allen, Benedict Arnold, La Fayette, George Washington, John Adams, Thomas Jefferson, Alexander Hamilton, Robert Fulton, Tecumseh, James Madison, Andrew Jackson, Henry Clay, Daniel Webster, Black Hawk, Winfield Scott, Santa Anna, John C. Calhoun, and Gen. Zachary Taylor.

WAR OF SECESSION.

Operations in 1861.

1. In the East.

1. Army organized.
 - a. How?
 - b. Commander.
 - c. Places held by Federals.
 - d. Confederates.

2. West Virginia Campaign.
3. Bull Run Campaign.

} a. Engagements.

} b. Prominent officers.

} c. Results.

2. In the West.

1. In Missouri.
2. On the Mississippi.

} a. Engagements.

} b. Prominent officers.

} c. Results.

3. Naval and Coast Operations.

1. Places held.

} By Federals.

} By Confederates.

4. Foreign Relations.

1. With England and France.
2. Trent affair.

Operations in 1862.

1. In the West.

1. Position.

} a. Federal.

} b. Confederate.

2. Engagements.
3. Movements—trace movements of armies on the map.
4. Leading officers—Federal, Confederate.
5. Results.
 - a. Of each engagement.
 - b. Of campaign.
2. In the East.
 1. Disposition of troops. { a. Federal.
b. Confederate.
 2. Peninsula Campaign.
 - a. Object.
 - b. Date.
 - c. Route.
 - d. Engagements.
 - e. Leading officers.
 - f. Important events.
 - g. Results.
 - h. Draw map of route taken.
 3. Lee's Invasion of the North.
 - a. Date.
 - b. Object.
 - c. Route.
 - d. Engagements.
 - e. Leading officers.
 - f. Important events.
 - g. Results.
 4. On the Rappahannock.
 - a. Engagements.
 - b. Date.
 - c. Results.
 5. At New Orleans.
 - a. Date.

- b. Results.
- c. Draw map of New Orleans and vicinity.
- 6. Naval Actions.
 - a. Engagements.
 - b. Results.

Operations in 1863.

- 1. Emancipation Proclamation.
 - a. Date.
 - b. Its provisions.
 - c. Effect.
- 2. In the East.
 - 1. Position in spring of 1863.
 - a. Federal.
 - b. Confederate.
 - 2. Change of Commanders.
 - a. Cause.
 - b. What change?
 - c. When made?
 - 3. Battle of Chancellorville.
 - a. Date.
 - b. Object.
 - c. Commanders.
 - d. Results.
 - 4. Lee's Invasion of Pennsylvania.
 - a. Date.
 - b. Object.
 - c. Route.
 - d. Engagements.
 - e. Commanders.
 - f. Important events.
 - g. Results.
 - 3. In the West.

1. Position.
 - a. Federal.
 - b. Confederate.
2. Army of Tennessee.
3. Army of the Cumberland.
4. Draft Riots.
 1. Where?
 2. Cause.
 3. Results.

} a. Commanders.
 } b. Object.
 } c. Route.
 } d. Engagements.
 } e. Important events.
 } f. Results.

Operations of 1864.

1. In Virginia.
 1. Position.
 - a. Federal.
 - b. Confederate.
 2. Grant's move on Richmond.
 3. Command under Butler.
 4. Sheridan's Valley Campaign.
2. In the West.
 1. Sherman's Campaign.
 2. Thomas' Campaign.
 3. Red River Expedition.
 4. Naval operations.

} a. Object.
 } b. Route.
 } c. Engagements.
 } d. Important events.
 } e. Commanders.
 } f. Results.

} a. Position.
 } b. Object.
 } c. Route.
 } d. Commanders.
 } e. Engagements.
 } f. Important events.
 } g. Results.
 } h. Draw map of Western and Southern States showing movements of the army.

3. Lincoln's Re-election.
 1. By what party?
 2. Meaning of the election.

Operations of 1865.

1. Sherman's movements.
2. Sheridan's movements.
3. Grant's movements.
4. Assassination of Lincoln.
 1. By Whom?
 2. Effect on the country.
 3. Results.
5. Jeff. Davis captured.
 1. Where?
 2. When?
6. Army disbanded. When?

Johnson's Administration, 1865 to 1869.

1. Election.
 2. How made President?
 1. By what party?
2. Important Facts.
 1. Reconstruction.
 - a. What steps taken.
 2. Public debt.
 - a. Amount.
 - b. Steps taken to meet it.
 3. Foreign Relations.
 - a. With France in regard to Mexico.
4. Impeachment of Johnson.
 - a. Causes.
 - b. Results.

5. States Re-admitted.

a. What?

b. How?

6. Purchase of Alaska.

a. Object.

b. Price paid.

Grant's Administration, 1869 to 1877.

1. Election.

1. By what party?

2. Meaning of the election.

2. Important Facts.

1. Constitutional Amendments.

a. What?

b. Provisions.

**REVIEW OF CONSTITUTIONAL PERIOD FROM BEGINNING OF
WAR OF SECESSION TO 1869.**

1. List of prominent actors in War of Secession, stating for what each was noted.

2. List of battles, and state who was the successful party.

3. Give a written history of the War of Secession.

4. Prepare a sketch of the life and services of Stephen A. Douglas, Abraham Lincoln, William H. Seward, Jefferson Davis, Stonewall Jackson, U. S. Grant, Geo. B. McClellan, Phil. Kearney, Charles Sumner, Horace Greeley, Andrew Johnson, Robert E. Lee, W. T. Sherman, Geo. H. Thomas.

5. Draw a map of the United States, and locate all the important places where battles were fought, and state the object of such battles.

PHYSIOLOGY AND HYGIENE.

PART I.

1. Classification of Bodies.
 1. Organic bodies. { a. Define.
 2. Inorganic bodies. { b. Examples.
2. Organic bodies divided.
 1. Vegetable. { a. Define.
 2. Animal. { b. Examples.
3. Animal Characteristics.
 1. Manner of taking food. { Compared with vegetables.
 2. Nervous system.
4. Animal Sub-Kingdoms.
 1. Radiates.
 2. Mollusks.
 3. Articulates.
 4. Vertebrates. { a. Define.
b. Examples.
5. Vertebrates Classified.
 1. Fishes.
 2. Reptiles.
 3. Birds.
 4. Mammals. { Describe each class.
6. Relation of Man to the Lower Animals.
 1. Characteristics of man.
 - a. Frame-work of body.
 - b. Face.

- c. Expressive functions.
- d. Mind.

7. Human Body Divided into Systems.

- 1. Nutrition.
- 2. Voluntary Motion.
- 3. Nervous Sensibility and Motor Force. } Consists of.

NUTRITION.

- 1. Food.
 - 1. Albuminate. } a. Define.
 - 2. Carbanaceous. } b. Why so called.
- 2. Mouth.
 - 1. Mastication.
 - a. Define.
 - 2. Mucus Membrane.
 - a. Describe it.
 - b. Why so called?
 - c. Its functions.
 - 3. Serous Membrane.
 - a. Describe it.
 - b. Why so called?
 - c. Its functions.
 - 4. Teeth.
 - a. Composition.
 - b. Number of sets.
 - c. Number in each set.
 - d. Classes.
 - e. Shape and functions.
- 3. Salivary Glands.
 - 1. Parotid.
 - 2. Submaxillary. } a. Situation.
 - 3. Sublingual.

4. **Saliva.**
 - a. Describe it.
 - b. Its use.
5. **Tongue.**
 - a. Describe it.
 - b. Its use.
6. **Pharynx.**
 - a. Shape.
 - b. Structure.
 - c. Lining.
 - d. Openings.
 - e. Termination.
7. **Esophagus.**
 - a. Position.
 - b. Extent.
 - c. Coats, number and description.
 - d. Functions.
 - e. Termination.

DIGESTION.

1. **Stomach.**
 - a. Shape.
 - b. Position.
 - c. Orifices.
 - d. Functions.
 - e. Coats—describe each.
 - f. Sympathy between Stomach and Mouth.
 - g. Process of digestion in the Stomach.
 - h. Formation of chyme.
2. **Intestinal Canal.**
 1. **Small Intestine.**

- 1. Duodenum. } a. Shape.
2. Jejunum. } b. Length.
3. Ileum. } c. Coats.
 } d. Location.
 } e. Why so named.
- 2. Mesentery. } a. Location.
 } b. Functions.
- 3. Lacteals. } c. Why so named?
- 4. Large Intestine.
 - 1. Cæcum. } a. Length.
2. Colon. } b. Structure.
3. Rectum. } c. Use of the Ileo-Colic valve.
- 3. Liver.
 - 1. Location and shape.
 - 2. Functions.
- 4. Pancreas.
 - 1. Location and shape.
 - 2. Functions.
- 5. Chyle; how formed and where transmitted?
- 6. Thoracic Duct.
 - 1. Location and functions.

CIRCULATION.

- 1. Heart.
 - 1. Location, position and shape.
 - 2. Divisions; right and left sides compared.
 - 3. Action described; valves and their uses.
- 2. Arteries.
 - 1. Structure, ramifications, functions.
- 3. Capillaries.
 - 1. Structure, location, functions.
- 4. Veins.
 - 1. Origin, structure, termination, valves of, functions;

how distinguished from arteries?

5. Pulse; define; how caused?
6. Lymphatics; structure, functions, communications, use.
7. Absorbents; define, functions.
8. Anastomosing Vessels; define, communications, use.

RESPIRATION.

1. Respiratory Apparatus; consists of, its purpose.
2. Trachea; location, structure, communications, functions.
3. Bronchia; origin, ramifications, terminations, structure.
4. Air Cells; location, structure, functions; how gases are transmitted;
5. Lungs; number, position, functions.
6. Diaphragm; define, structure, shape; describe the process of respiration.
7. Purpose of Respiration; define, use of oxygen to the system.
8. Animal heat; definition, its source.
9. Liver; describe it, give its functions.
10. The Skin; coats named and described, glands named and described, insensible perspiration defined.
11. The Kidneys; define, locate, functions.
12. Temperature of the Body; in different animals, cause of difference, in different climates.

GROWTH AND REPAIR.

1. Blood; composition of, coagulum, serum, proportion, analysis of the blood.
2. Blood disks; what are they? different kinds.
3. Cell structure; define, how formed and removed? mode

of growth, how destroyed? relation of the blood to cell transformation.

4. Quantity of blood in the body.

THE SKELETON.

1. Bones.
 1. Their uses.
 2. Their structure, process of ossification, covering, chemical composition, shape, definition and classes of joints.
2. Cartilages; definition and uses.
3. Ligaments; form, use.
4. Bones of the head.
 1. Skull bones; named and located.
 2. Face bones; number.
5. Spinal Column; number of bones, shape, how held together.
6. Ribs; number, curvatures, articulations.
7. Sternum; describe and locate.
8. Bones of the Pelvis; number, names, shape, location.
9. Upper Extremities.
 1. Shoulder.
 2. Arms.
 3. Hands.
10. Lower Extremities.
 1. Thigh.
 2. Leg.
 3. Foot.

MUSCLES.

1. Formation; fibers, fascia.
2. Muscular Contraction; how caused; its power.

3. Use of the Muscles.
4. Tendons; formation, use, union with muscles.
5. Arrangement of Muscles; to produce motion, in pairs.
6. Muscular Motion.
 1. Voluntary. { Define.
 2. Involuntary. { Examples.

LARYNX.

1. Position, shape, communication.
2. Cartilages.
 1. Cricoid.
 2. Thyroid.
 3. Arytenoid } Describe each.
3. Epiglottis and Glottis; define, use.
4. Vocal Cords; position, formation, use.
5. Pitch of Voice; how caused, how modulated.
6. Functions of the Larynx.

NERVOUS SYSTEM.

1. Brain; how divided, membranes, describe each membrane, composition, its function.
2. Cranial Nerves; number, extent, connections, arrangement, functions.
3. Spinal Nerves; divisions and names, number, ramifications, arrangement.
4. Motor Nerves; origin, functions, effect of injury to.
5. Sensitive Nerves; origin, termination, functions.
6. Effect of an injury to a nervous trunk.
7. Sympathetic nervous system defined and its relation to other nerves explained.

SENSE OF SEEING.

1. Eye.
 1. Divisions.
 2. Muscles; number, attachments, functions.
 3. Lachrymal Glands; location, functions.
 4. Coats of the Eye; name, locate and describe each.
 5. Iris.
 6. Pupil.
 7. Ciliary Processes.
8. Aqueous Humor; locate, shape, effect of the shape.
9. Crystalline Lens; location, nature, shape.
10. Vitreous Humor; location, nature.
11. How objects are seen; explain by illustration, why seen erect.
12. Spherical Aberration; its cause and effect.
13. Short-Sightedness; its cause, its cure.
14. Long-Sightedness; its cause.
15. Size and Distance of Objects; how determined, effect of transparency of air.
16. Double Vision; how caused, advantage of two eyes, influence of mind on vision.

NERVOUS FUNCTIONS.

1. Spinal Cord Analyzed.
 1. Gray matter.
 2. White matter.

Proportion and location.
3. Communication of Spinal Nerves explained; function of Spinal Cord.
2. Motions.
 1. Voluntary.
 2. Involuntary.
 3. Reflex.

Define.

Give cause.

Give examples.

PHYSIOLOGY
MENTAL FUNCTIONS.

1. Thought.
 1. Dependent on; how shown?
 2. Measured by; how shown?
 3. Origin of; how proven?
 4. Difference between voluntary and involuntary thought
 5. Thought modified by training; give examples.
 6. Man compared with the lower animals in regard to thought.

SLEEP.

1. Effect on the senses; examples.
2. Effect on the nervous functions; examples.
3. Effect on the mental functions; examples.
4. Effect on the brain; examples.
5. Amount necessary.
6. Difference between coma and sleep.

PART II.

HYGIENE.

1. Hygiene defined and compared with Physiology.
2. Health and disease defined and compared.
3. Influence of Hygiene on duration of life.
5. Water. Sources of impurity; how purified? Proper temperature of drinks.
5. Drinks.
 1. Tea.
 2. Coffee.
 3. Chocolate.
 4. Fermented.

Define.
Effects on the system.

CLASSIFICATION OF FOOD.

1. Animal. } Define.
2. Vegetable. } Give examples.

FOOD DIVIDED INTO GROUPS.

1. Flesh forming. }
 1. Gluten.
 2. Fibrine.
 3. Caseine.
 4. Albumen.
 5. Gelatine.
 Chemical properties.
Found where?
2. Starchy group. } Where found?
3. Fatty group. } Use.

KINDS OF FOOD—THEIR VALUE.

1. Milk. Its effect on the system; by what circumstances modified?
2. Cheese. How produced? Value as food; quantity to be eaten.
3. Butter. Belongs to which group? Value as food.
4. Eggs. Which group? Value as food; how cooked.
5. Animal Flesh. Different kinds; value of each as food; how cooked?
6. Fattening Animals. What precaution should be taken?
7. Wholesome Meat. How distinguished?
8. Wheat. }
9. Rye. }
10. Corn. }
11. Barley. }
12. Oats. }
13. Beans. }
14. Peas. }
15. Rice. }
16. Potatoes. }
17. Turnips. }
18. Beets. }
19. Onions. }
20. Cabbage. }
21. Fruits. }
22. Salt. }
23. Vinegar. }

Composition and dietetic value.

Manner of cooking.

What is gained by cooking?

Manner of seasoning.

Precautions necessary in the use of seasoning.

QUANTITY OF FOOD.

1. How modified by digestion?

1. Tobacco.
2. Temperature.
3. Exercise.
4. Ventilation.
5. Change of habits.
6. Mental labor.

}

}
Effect on digestion.
Examples.

TIME OF TAKING FOOD.

1. Intervals. How long? Importance of regularity.
2. Breakfast. } Where?
3. Dinner. } Why early?
4. Supper. } Kind of food.
5. Eating between meals. Effect of.
6. Manner of eating. Fast or slow and why? Temperature of food; importance of thorough mastication.
7. Good teeth necessary. Why? Rules for preserving the teeth.
8. Effect of eating when fatigued.
9. Rest should follow meals. Why?
10. Quantity of food. How measured?

CIRCULATION.

1. Pressure of the veins. How injurious?
2. Change of temperature. Effect on circulation; cause; examples.
3. Influence of the mind on circulation. What? Examples.
4. Bleeding from arteries. How checked?

BREATHING.

1. Movements of the ribs in breathing. Explain; how checked? Effect of compression.

2. Compression of the ribs. When most injurious? Why?
3. Imperfect Breathing. Define; effect; how corrected?

PURE AIR.

1. Composition of Air. Elements; proportion; functions of each element.
2. Impure Air. Its source; its effect.
3. Means of Purifying the Air. Natural; artificial.
4. Diminution of Oxygen by breathing.

ANIMAL HEAT.

1. Temperature of the body.
 1. How influenced by age.
 2. Climatic influence.
 3. Uniform temperature maintained; how?
 4. Overheated rooms; effects of.
 5. Proper temperature of rooms.
 6. Means of reducing heat.
 7. Effects of exposure to currents of air.
 8. Importance of moisture.
2. Bathing.
 1. Why necessary? How to bathe? Caution in bathing; kinds of baths described.
3. Clothing.
 1. Its relation to health.
 2. Quantities.
 3. Variation.
 4. Kinds compared.
 5. Bones compressed by. Effects; examples.

PHYSIOLOGY
BONE.

1. Bone nutrition.
 1. What food necessary for formation and repair of bone?
 2. Effect of an over-supply of bone earth.
2. Distortion of bones.
 1. How produced? Examples.
 2. Effect of stooping position.
3. Deformed Feet.
 1. How produced? Effects.
4. Spinal Curvature. Cause; remedv.
5. Effect of exercise on Bones.

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EXERCISE.

1. Muscular motion. Its effect.
2. Kind of air best for exercise. Why?
3. Sunlight and Shade.
 1. Their relation to good health. Examples.
4. Amount of exercise required. How increased?
5. Relation of mental and physical exercises.
6. Rules for taking exercise.
7. Games. What kind beneficial? Why?
8. Manual Labor. Healthful; injurious.
9. Best time for study.

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BRAIN POISONS.

1. Alcohol.
 1. Its chemical relation.

- 2. Its effect on and why? } 1. Digestion.
 2. Chemical change.
 3. Muscular force.
 4. Animal heat.
 5. Nervous system.
 6. Vision.
 7. Smell.
 8. Hearing.
 9. Taste.
 10. Mind.
 11. Duration of life.
- 2. Tobacco.
 - 1. Effects compared with those of alcohol.
 - 2. Chemical properties compared with alcohol.
- 3. Opium.
 - 1. Compared with alcohol and tobacco.

SLEEP.

- 1. Its necessity.
- 2. Its effect.
- 3. Amount required.
- 4. Best time for sleep.
- 5. Effect of producing sleep by medicine.

WAKEFULNESS.

- 1. Its effect.
- 2. Its remedy.

INJURIES FROM ACCIDENTS.

- 1. Bleeding from wounds. } Their treatment.
- 2. Bruises and burns.

PHYSIOLOGY
ACUTE DISEASES.

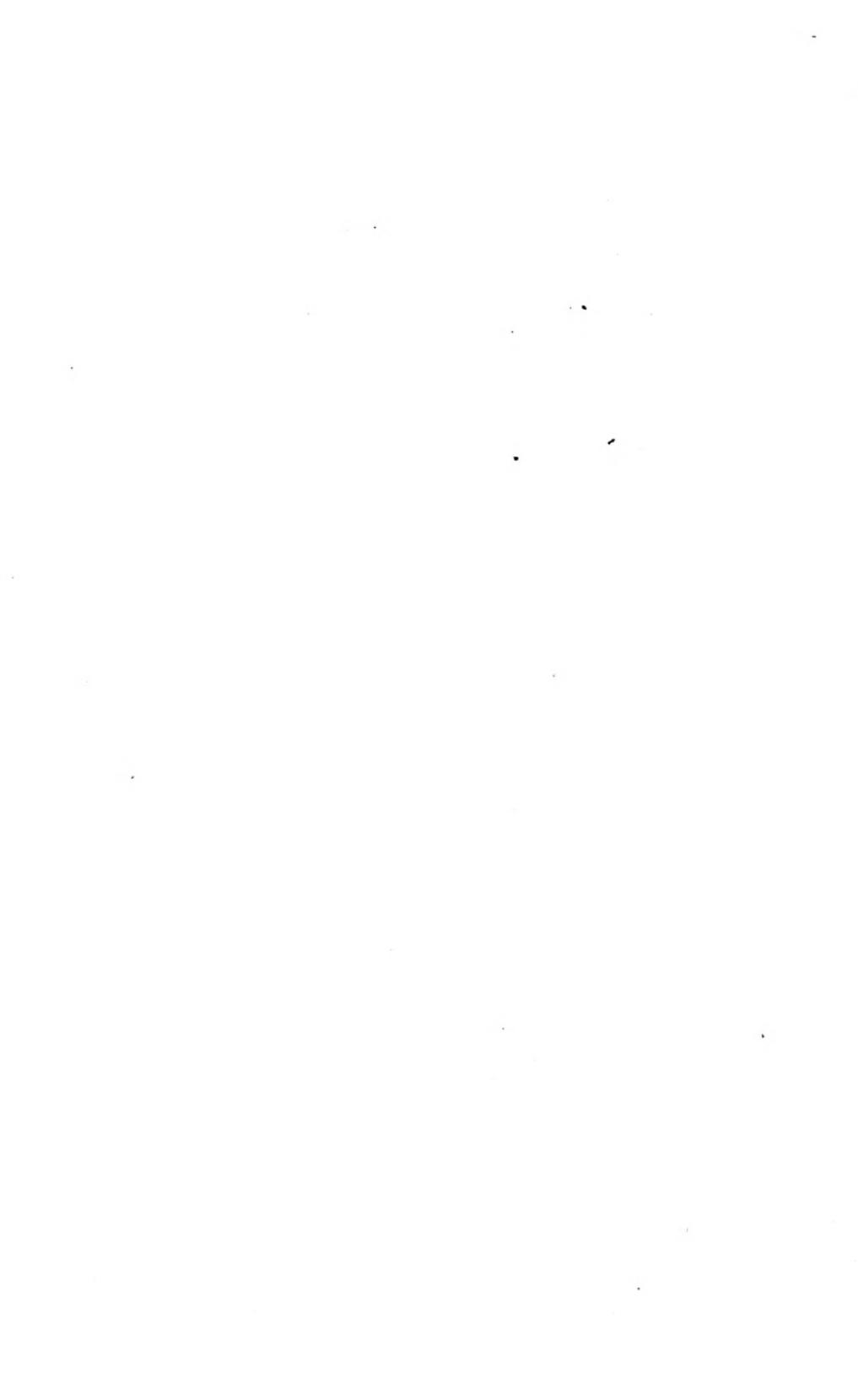
1. Symptoms of their approach.
2. Treatment.

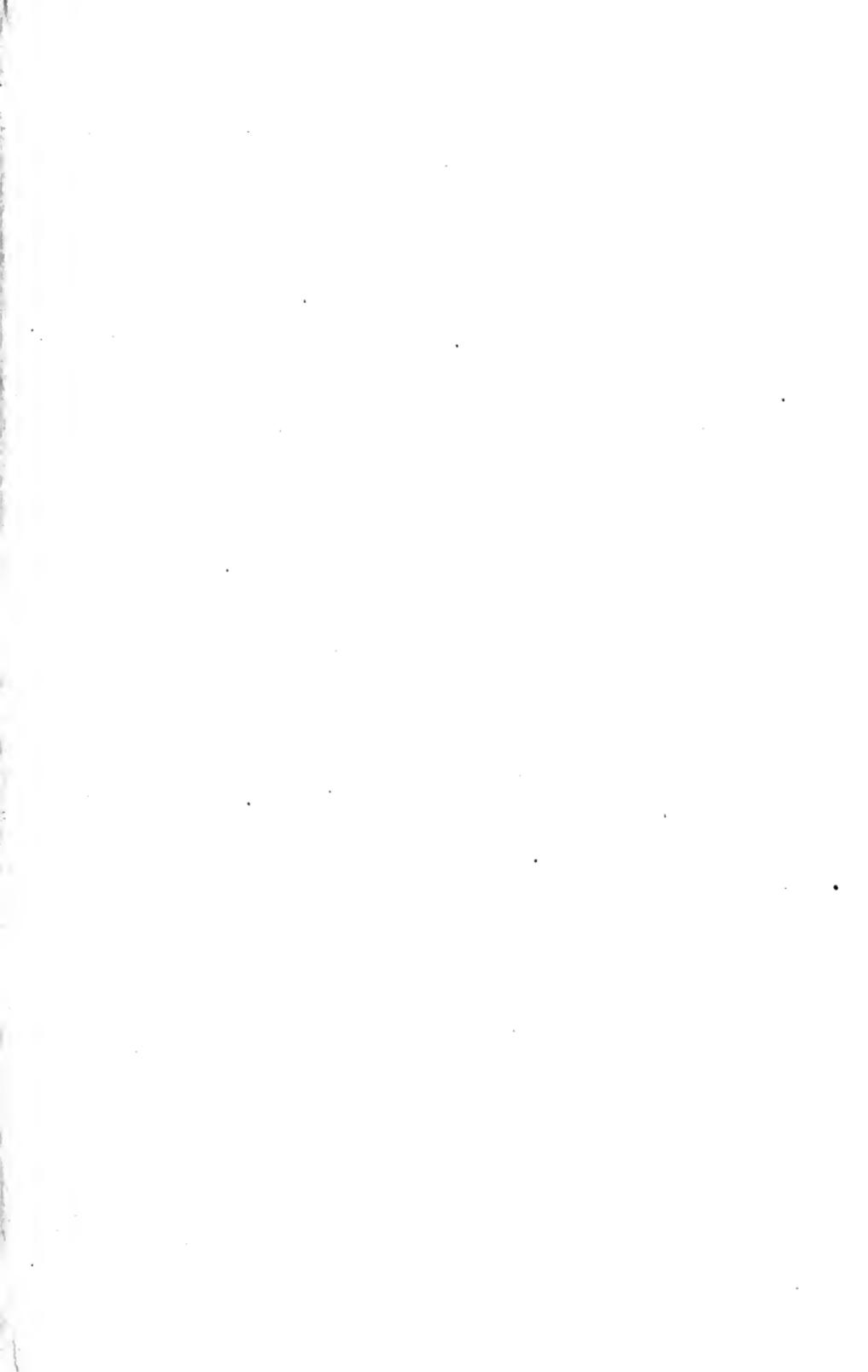
MEDICINES.

1. Their use.
2. Their abuse.

THE END.







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